Fig - 1

Attitude Estimation Logic

MAGELLAN

DRIVER INFORMATION SYSTEMS

John Begin

Preliminary

Rev. A-2

2-1-99

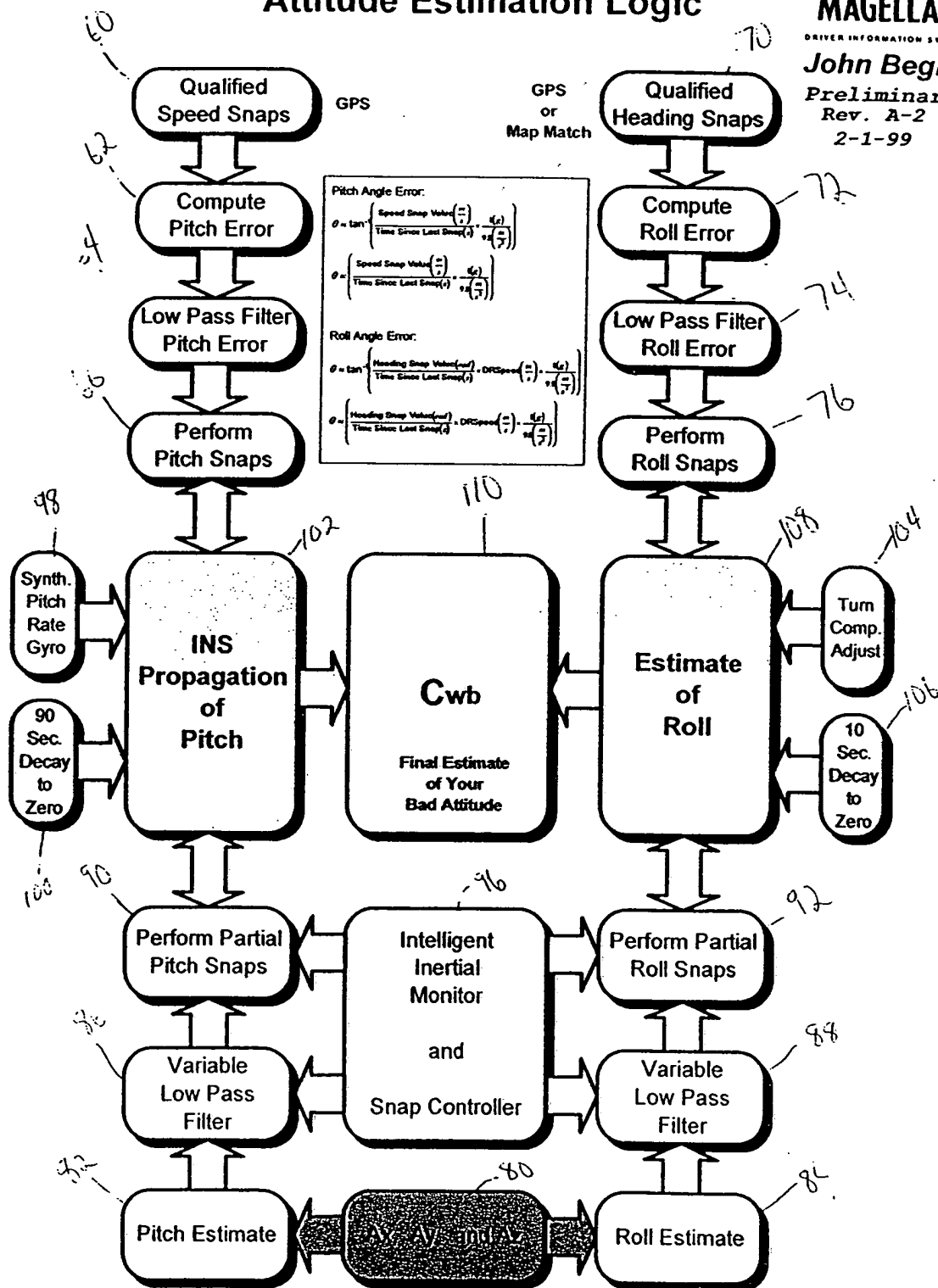
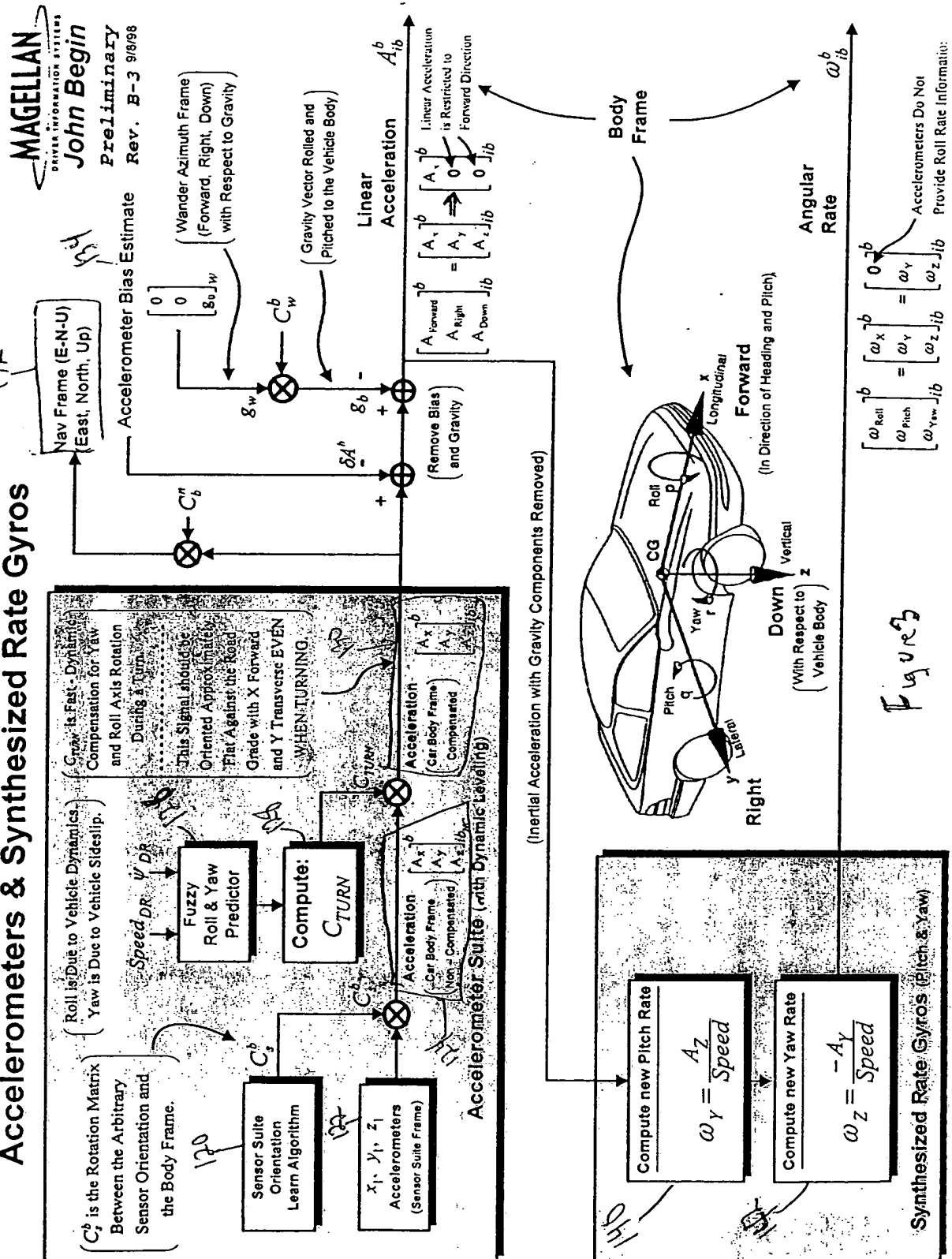


Figure 2

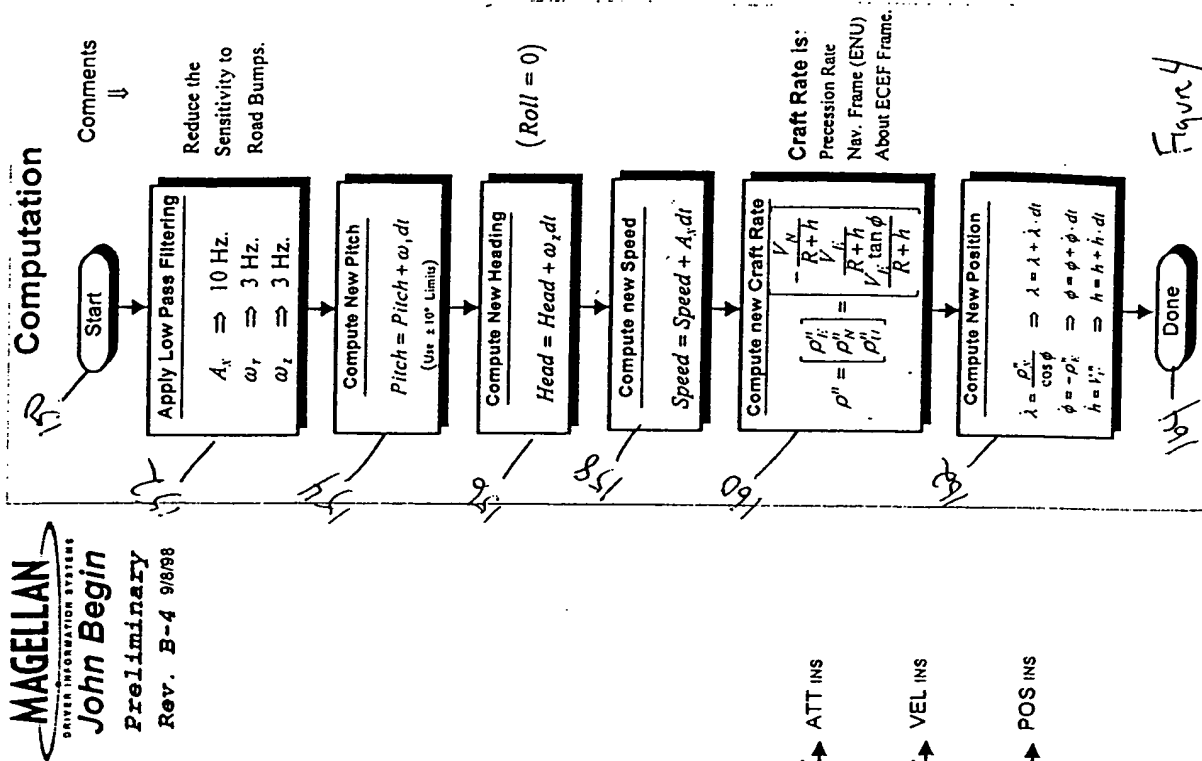
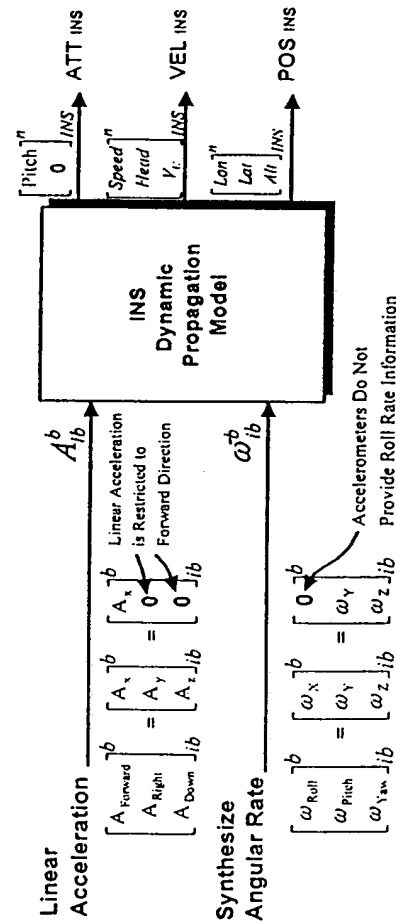
Accelerometers & Synthesized Rate Gyros



INS Dynamic Propagation Model

Notes

- Knowledge Based Limits may be utilized with all Variables including Turn Rate, Forward Acceleration, Forward Speed, Pitch & Pitch Rate.
- Attitude does Not Include Heading. Since the Vehicle only moves in the \pm Forward Direction, Heading Information is contained within V_E and V_N and is propagated as velocity.



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